## CHECKLIST ENVIRONMENTAL ASSESSMENT

**Project Name:** SME water intake ROW

**Proposed** 

Implementation Date: Spring 2007

**Proponent:** Southern Montana Electric **Location:** NW S14 T.21 N. R. 5 E.

County: Cascade

Trust: NAV River (Mo)

## I. TYPE AND PURPOSE OF ACTION

Southern Montana Electric is requesting an easement for a water intake pipeline in NW1/4 S14 T.21N. R.5E. approximately 6 miles east of Great Falls Montana. State land involved is the Missouri Riverbed upstream of Morony Dam. The thirty foot easement would extend 500' into the Morony Dam pool and consist of 0.34 acres. The easement would allow installation of a 20" pipeline with intake screen supported on piles at ~ 50' intervals. The entire structure would be installed approximately 18' below the Morony pool operating range. The easement is a small part of a larger proposal to build and operate a 250 megawatt power plant near Great Falls. This EA applies to the issuing of an easement on the State land involved. Larger issues such as the need for, size and location of the power plant, amount of water use and general location of easements are addressed in the EIS for the power plant.

# **II. PROJECT DEVELOPMENT**

# 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The overall project has been the subject of extensive scoping and environmental review. The lead agencies in the scoping and development of the EIS are USDA and Mt. DEQ. See the EIS for a listing of scoping activities.

## 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

310/404 permits for pipe location.

#### 3. ALTERNATIVES CONSIDERED:

Not issuing the easement.

# III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

#### 4. GEOLOGY AND SOIL QUALITY. STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

None. All construction disturbance would occur on the riverbed under the water surface.

# 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Some minor disturbance to the riverbed would occur during construction. Impacts would be minimal and of short duration. Larger issues relating to operation of the generating plant, such as the quantity of water used cumulative impacts of use etc... are addressed in the EIS.

#### 6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

None.

#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

None. No river bank disturbance is expected since pipe jacking will be utilized to install the pipe from a caisson located on adjacent private land.

# 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The inlet would be screened, to prevent debris or fish from being drawn into the intake. The intake pipe and support piles would be under the water surface, having no effect on wildlife or birds. The intake water velocity would be less than 0.5 ft/sec, as required by 40 CFR Part 125, subpart I.

## 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

None.

#### 10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

None. The easement area is riverbed. There would be no effect under, upon or over the river bed which would affect any historical resources.

#### 11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

None. The project is not on a prominent feature. Construction activities would be visible from adjacent riverbanks during the installation. The intake structure would be under water and not visible.

# 12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

## 13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The overall SME generating plant project is analyzed in the EIS for the project.

## IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

# 14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

None.

## 15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

None.

## 16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The portion of the project related just to the water intake installation is negligible. However, the overall project is a multi-million dollar operation with the potential to create many jobs during the construction and operation phases. The potential effects of this related action are described in the overall EIS. The ability to generate power includes the need for water, which is a critical factor in the viability of the whole project.

## 17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

While tax revenues for the water intake structure are negligible, the overall project would generate relatively large local and state tax revenues, and the viability of the project depends upon the ability to obtain water for cooling and for steam.

#### 18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

None.

# 19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The project would be subject to 310/404 permit requirements.

## 20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

None. Issuing the easement would not alter existing access or recreational activity.

## 21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

None.

#### 22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

None.

#### 23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

None.

## 24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Issuing the easement would result in a small amount of income to the State, with minimal impact. Issuing the easement facilitates a critical aspect of the overall power plant proposal, ie. the ability to access water for cooling and for steam production.

EA Checklist Prepared By:

Name: Robert Vlahovich

Title: Special Uses Coord.

V. FINDING

**Date:** 1/29/07

#### **25. ALTERNATIVE SELECTED:**

I have selected the alternative to recommend that the Land Board approve issuance of a 0.34 acre easement in/on the bed of the Missouri River for this water intake. The rate per acre should be no less than 50% of the actual land values per acre for the adjacent river frontage land. I would estimate the value of the easement to be not less than 680.00 (4000/ac 50% 0.34 ac.)

#### 26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The impacts to the trust land are minimal to non-existent. The impacts for the overall project are described in the related EIS, and are not a part of this analysis. The proposed water intake facility, after installation, will be fully submerged and below the lowest anticipated water level in the reservoir. The intake will be screened and the intake velocity will be less than 0.5 ft/sec, so no impacts to fish are expected.

# 27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS: EIS More Detailed EA X No Further Analysis EA Checklist Approved By: Name: D.J. Bakken Title: Helena Unit Manager Signature: /S/ Darrel J. Bakken Date: 5/22/2007

